

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of the claims as follows:

1. (Currently amended). A radiosensitizer agent for treatment of cancer and tumors, said radiosensitizer agent comprising an aqueous solution of a halogenated xanthene, said halogenated xanthene interacting with ionizing radiation applied to said cancer or tumor to enhance the therapeutic efficacy of said ionizing radiation, wherein said halogenated xanthene comprises disodium 4,5,6,7-tetrabromoerythrosin.

2-9. (Canceled)

10 (Currently amended). A radiosensitizer agent for treatment of cancer and tumors using ionizing radiation, said radiosensitizer agent comprising an aqueous solution of a halogenated xanthene wherein said halogenated xanthene is activated using x-rays having an energy greater than 30 keV, said halogenated xanthene comprising disodium 4,5,6,7-tetrabromoerythrosin.

11-13. (Canceled)

14. (Previously presented) A radiosensitizer agent for treatment of cancer and tumors, said radiosensitizer agent comprising an aqueous solution of a halogenated xanthene, said halogenated xanthene interacting with ionizing radiation applied to said cancer or tumor to enhance the therapeutic efficacy of said ionizing radiation, wherein said halogenated xanthene comprises 4,5,6,7-tetrabromoerythrosin, wherein at least one biological targeting moiety is attached to said halogenated

xanthene to enhance targeting of said halogenated xanthene to biologically sensitive structures of said cancer or tumors.

15-50. (Canceled)

51 (Currently amended). A radiosensitizer agent for treatment of cancer and tumors using radiosensitization or ionizing radiation, said radiosensitizer agent comprising an aqueous solution of a halogenated xanthene wherein said ionizing radiation is approximately greater than or equal to 1 keV and less than or equal to approximately 1000 MeV, said halogenated xanthene comprising disodium 4,5,6,7-tetrabromoerythrosin.

52. (Previously presented) The radiosensitizer agent of Claim 1 wherein said ionizing radiation is approximately greater than or equal to 1 keV and less than or equal to approximately 1000 MeV.

53-55. (Canceled)

56. (Previously presented) The radiosensitizer agent of Claim 1 wherein said ionizing radiation comprises x-rays.

57. (Previously presented) The radiosensitizer agent of Claim 56 wherein said x-rays have an energy between 30 kiloelectron volts and 1000 megaelectron volts.

58-65. (Canceled)

66. (Previously presented) The radiosensitizer agent of Claim 51 wherein said halogenated xanthene also is an imaging contrast agent.

67.(Canceled)

68 (Previously presented). A radiosensitizer agent for treatment of cancer and tumors, said radiosensitizer agent comprising a halogenated xanthene, said halogenated xanthene interacting with ionizing radiation applied to said cancer or tumor to enhance the therapeutic efficacy of said ionizing radiation, wherein at least one biological targeting moiety is attached to said halogenated xanthene to enhance targeting of said halogenated xanthene to biologically sensitive structures of said cancer or tumors.